

Home Office.

DEPARTMENTAL COMMITTEE ON COMPENSATION FOR
INDUSTRIAL DISEASES.

REPORT

OF THE

DEPARTMENTAL COMMITTEE

APPOINTED TO

INQUIRE AND REPORT

WHETHER THE FOLLOWING DISEASES CAN PROPERLY BE ADDED
TO THOSE ENUMERATED IN THE THIRD SCHEDULE OF THE
WORKMEN'S COMPENSATION ACT, 1906,

NAMELY:

(1) Cowpox; (2) Dupuytren's Contraction; (3) Clonic Spasm of
the Eyelids, apart from Nystagmus; (4) Writers' Cramp.

Presented to both Houses of Parliament by Command of His Majesty.



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DEPARTMENTAL COMMITTEE ON COMPENSATION FOR
INDUSTRIAL DISEASES.

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TERMS OF REFERENCE.

I hereby appoint :—

Mr. ELLIS J. GRIFFITH, K.C., M.P., Parliamentary Under Secretary of State for the Home Department;

Sir THOMAS CLIFFORD ALLBUTT, K.C.B., M.D., F.R.S., Regius Professor of Physic, Cambridge University;

His Honour JUDGE ALFRED HENRY RUEGG, K.C.; and

THOMAS MORISON LEGGE, Esq., M.D., Medical Inspector of Factories;

to be a Committee to inquire and report whether the following diseases can properly be added to those enumerated in the Third Schedule of the Workmen's Compensation Act, 1906, viz.: (1) Cowpox; (2) Dupuytren's Contraction; (3) Clonic Spasm of the Eyelids, apart from Nystagmus.

And I further appoint Mr. Ellis Griffith to be Chairman and Mr. Alexander Maxwell,* of the Home Office, to be Secretary of the Committee.

Whitehall,

12th April 1912.

REGINALD McKENNA.



By letter, dated 19th October 1912, the Secretary of State requested the Committee to inquire also concerning Writers' Cramp.

* On 16th May 1912, Mr. Arthur Locke was appointed Secretary in place of Mr. Alexander Maxwell, resigned.

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DEPARTMENTAL COMMITTEE ON COMPENSATION FOR
INDUSTRIAL DISEASES.

R E P O R T.

To THE RIGHT HONOURABLE REGINALD MCKENNA, M.P., SECRETARY OF STATE FOR
THE HOME DEPARTMENT.

SIR,

THE Committee has held 11 sittings, at nine of which evidence was taken, examined 32 witnesses and re-examined five of them, and visited factories at Nottingham with a view to supplementing the information obtained in that part of our Inquiry which related to Dupuytren's contraction. As the outcome of our investigations we have the honour to present the following report.

CLONIC SPASM OF THE EYELIDS, apart from NYSTAGMUS.

The necessity for some investigation concerning Clonic Spasm of the Eyelids (*i.e.*, spasmotic contraction and relaxation of the muscles of the eyelids) was indicated by suggestions that miners suffering from such spasm had been refused certificates of compensation because they did not exhibit the *symptom* Nystagmus (*i.e.*, oscillation of the eyeballs), though the *disease* nystagmus was already scheduled by the Secretary of State's Order of the 22nd May 1907. The inquiries subsequently made by you of ophthalmic specialists and others had revealed considerable divergencies of experience and opinion as to the existence and nature of such a spasm, particularly to a disabling extent, apart from nystagmus; some authorities suggested that it was a variety of nystagmus, others that it was at any rate a symptom of that disease, and others that it was merely a habit. The questions involved were therefore referred to this Committee.

You have also called our attention to the remarks made by the Lord President of the Scottish Court of Session in delivering judgment in the case *McGinn v. Udston* (49 Sc. L. R. 531; 5 Butterworth's Compensation Cases, 559; reprinted in Appendix XVI. to this Report). These observations were to the effect that the condition at present scheduled being "nystagmus" and not "miners' nystagmus," a miner who exhibits as a sign, *e.g.* of disseminated sclerosis or other condition *not* due to the nature of his employment, the characteristic symptom of oscillation of the eyeballs is nevertheless given, by the use of the word "mining" in the second column of the schedule, the benefit of a presumption, which his employer must rebut if he wishes to escape liability for compensation, that the disease was due to the nature of his employment. The Lord President suggested that the term used in the Schedule should have been "miners' nystagmus" but, in considering this suggestion, it is necessary to remember that this designation would not clearly cover cases of nystagmus as an occupational disease if they occurred among persons other than miners. Under the existing terms of the schedule persons other than miners may claim compensation for disablement by nystagmus, but on them (as distinguished from miners) is the burden of proof that in their case the disease is due to the nature of their employment.

We, therefore, take the terms of our reference relating to clonic spasm, read with the papers relating to *McGinn v. Udston*, to cover the whole question of the appropriateness of the terms in which nystagmus at present is scheduled, *i.e.*, (1) whether, as regards clonic spasm of the eyelids, the word "nystagmus" is too narrow as excluding either (a) a variety of the disease or the consideration by certifying surgeons and medical referees of one of its characteristic symptoms, or (b) a condition not accompanied by nystagmic oscillation, but calling for the grant of compensation in cases of incapacity; (2) whether the word "nystagmus" is not, on the other hand, too wide as enabling claims for cases by miners in whom the nystagmus is not an industrial disease; and (3) whether any amendment designed to meet the second point might not unjustly operate to take away altogether any existing claim to compensation for nystagmus in the case of persons other than miners.

In view of the difficulty of deciding these questions we have taken very full evidence. We heard four representatives of the Mining Association of Great Britain, *i.e.*, Drs. W. Brown-Moir, T. Lister Llewellyn, W. E. Hume, and Robert McGhie; a representative of the Miners' Federation of Great Britain and Ireland, *i.e.*,

Dr. A. Rowley Moody; and two independent medical men specially qualified by their experience, *i.e.*, Dr. W. G. Laws and Dr. F. Shufflebotham. After hearing the evidence of these seven gentlemen we circulated to certain ophthalmic specialists and others a schedule of questions designed to elicit definite expressions of opinion on those points on which there was still room for doubt. Their replies, which have been of the greatest assistance to us, are printed in full in Appendix XII., and on a review of the evidence heard and the answers received, we are able to arrive at definite conclusions.

We find that the word "nystagmus" is no more than the name of a symptom, and cannot conveniently be employed to name a disease. It denotes only oscillation of the eyeballs. "Miners' nystagmus," on the other hand, is a term well understood to name a disease or group of symptoms, practically confined to miners, of which oscillation of the eyeballs (*i.e.*, "nystagmus") is the commonest, but not invariably present, objective sign. This disease has many symptoms, some subjective and some objective. We have no doubt that during its course, at some time or other, the symptom nystagmus appears in all cases. This is the conclusion we have come to on the evidence of those who have had the greatest experience, but we cannot deny that, among those we heard, much diversity of opinion was expressed as to whether it is present at all times, or even susceptible of elicitation by repeated tests under conditions favourable to its perception. And, in some cases accompanying it, or in others even replacing it in the later stages, may be clonic spasm of the muscles of the eyelids. Consequently the symptom nystagmus, however easily found in a great majority of cases, ought not in all to be taken as a conclusive test either of the presence or of the absence of a disease of which, after all, it is but one symptom. We find further, that the suggestion that it has been taken as such a test is not altogether unfounded. We are satisfied that cases of miners' nystagmus may have been wrongly diagnosed, and that certificates of disablement are likely to be refused, through too much insistence on this one test; and we are convinced that it is necessary to make it abundantly clear to all those concerned in the administration of the Act or in the diagnosis of cases, that the condition, the existence or non-existence of which to an incapacitating extent is to determine the question whether there can be a claim to compensation, is not the symptom nystagmus alone but the whole disease known as "Miners' nystagmus." We also find that it is not sufficient, and for various reasons would not be proper, merely to call attention also to the additional symptom clonic spasm; all the symptoms, whether subjective (*e.g.*, movements of objects, headache, giddiness, night blindness, and dread of light) or objective (*e.g.*, movements of the eyeballs, tremor of the eyelids, eyebrows, head, and even of the neck and shoulders) must be taken into account. The question for decision is: "Do the symptoms present in this individual, the objective symptoms and the subjective symptoms taken together, with or without the history of the case and the other available evidence, show that he has miners' nystagmus to such an extent that he is wholly or partially incapacitated within the terms of the Act?"

As regards the point raised in *McGinn v. Udston*, we find that the word "nystagmus," being only the name of a symptom, either names no disease at all and so gives no title to compensation, or (and this is the interpretation on which the court acted) includes nystagmus even when it is a symptom of forms of disease, (*e.g.*, Friedreich's ataxia, disseminated sclerosis, and tumour of the cerebellum) that are not industrial.

In view of the evidence given to us and the facts disclosed by recent researches as to the causation of miners' nystagmus by inadequate illumination at the coal face and elsewhere in the mine, we entertain the gravest doubt whether true miners' nystagmus can ever occur in persons other than miners. The Committee of 1907, however, seem to have had such cases in mind (for though in the body of their report they referred to "miners' nystagmus," in their recommendation they spoke only of "nystagmus"). We are, therefore, of opinion that any amendment of the existing schedule should be so framed as to preserve the existing claim to compensation for cases of miners' nystagmus in persons other than miners, if such cases occur.

Our conclusions are embodied in the following recommendations:—

- (1) To meet the point raised in *McGinn v. Udston* we recommend that the word "Nystagmus" added to the first column of the schedule by the Order of 22nd May 1907, should be replaced by the words "Miners' Nystagmus."
- (2) To meet the case of workmen not engaged in mining possibly contracting the disease we recommend that the terms used should be "miners' nystagmus in miners or others."

(3) For the purpose of making it clear that the point for determination is the presence or absence, not merely of the symptom nystagmus, but of the disease miners' nystagmus, we doubt whether it will be enough to circulate this report to the courts concerned and to issue instructions on the point to certifying surgeons and medical referees. We therefore recommend the addition in parentheses of the words ("a disease most " common among miners, of which oscillation of the eyeballs is the " commonest but not invariably present objective sign").

(4) We recommend the retention of the word "mining" in the second column of the schedule. This will retain to a miner having miners' nystagmus the benefit of the presumption that it was due to the nature of his employment, but, in the case of any other workman, will leave on him the onus of proof that the disease was so due.

COWPOX.

On this subject we heard evidence from Sir John McFadyean, Principal of the Royal Veterinary College, Dr. Monckton Copeman, F.R.S., of the Local Government Board, and Professor Penberthy, F.R.C.V.S., representing the Central Chamber of Agriculture. Sir Stewart Stockman, of the Board of Agriculture and Fisheries, briefly communicated his views, but was prevented by illness from attending the Committee when evidence was taken.

Cowpox is a disorder affecting milch cattle, characterised by an eruption on the udder and teats, and communicable to man through abrasions or cracks in the skin of the fingers in the process of milking. The eruption, when observed in an early stage in the cow, is described by Ceely as occurring "in the form of small papules which " develop into vesicles containing a limpid fluid. These vesicles are of a bluish or " livid colour, and may be surrounded with considerable erysipelatoid swelling and " inflammation. If ruptured, the vesicles tend to become irregular about the edges; " and unless care then be taken, are very apt to degenerate into foul and trouble- " some sores." The manifestations of the disease in the human subject, in the earlier stages at any rate, are similar. Occasionally the affected person inoculates other parts of the body, as, for example, the eyelid, and there is in many cases concurrent septic infection; but though in such cases, or in those attended with inflammation of the lymphatic vessels, there may be severe pain, the usual course of the disease much resembles that of the condition arising after vaccination. If the infected person is disabled, it is usually for a few days only. As regards the prevalence of the disease, several outbreaks were brought to our notice, and it was commonly admitted that other cases, mild or severe, occur but do not come to light. Persons affected with the disease even continue at milking, with the result that whole herds may be infected. This is an undoubted evil, but it scarcely comes within the scope of our Inquiry.

Diagnosis in the early stages is straightforward, and, in the later, there will generally be available collateral testimony as to the existence of the disease in the cow and possibly in other milkers. The disease is never spontaneous, but arises always from an antecedent case (*i.e.*, in a cow); it answers, therefore, to one test suggested by the Committee of 1907, for it is so specific to the employment of milking that its causation by the occupation can be established in individual cases. In the great majority of instances, however, it does not disable for more than about ten days at most; the cases, in comparison with the large number of persons employed in the agricultural industry, are very few; and many of those engaged in milking, being hired by the half-year or year, are not likely either to be discharged or to suffer pecuniary loss through a few days' disablement. We feel, therefore, that there is not sufficient ground for recommending the casting on thousands of farmers and dairymen of a liability involving the possibility of claims vexatious to them and not likely in any appreciable number of cases to result in benefit to the employees. For these reasons, and not because of any doubt as to the occupational character of the disease, we recommend that cowpox should not be scheduled.

DUPUYTREN'S CONTRACTION.

This malady, first described by Dupuytren, a French surgeon, was brought to the notice of the Chief Inspector of Factories in 1910 by Mr. Wardle, Secretary of the Amalgamated Society of Operative Lace Makers, who stated that it was very prevalent among "twist-hands" or "minders of lace machines" in Nottingham.

Dr. Collis, one of H.M. Medical Inspectors of Factories, and Mr. Eatock, the Inspector of Factories stationed at Nottingham, made an extensive inquiry on the spot, their report on which is reproduced in the First Appendix to this Report. Dr. Collis and Mr. Eatock gave evidence before this Committee, and the conclusions in their report were brought by the Home Office to the notice of manufacturers of lace or of lace-making machines, all replies touching on the question of compensation being referred to this Committee. A request from certain Scottish manufacturers for investigation of conditions in Scotland led to a further inquiry by Dr. Collis in the neighbourhood of Newmilns, on which he was recalled to give further evidence. All the members of the Committee visited Nottingham, inspected various lace factories in order to see the machines used and investigate the working conditions, and heard evidence in Nottingham from two representatives of the employers, from the Secretary of the Operatives' Union (Mr. Wardle), and from ten lace minders suffering from the affection. At a later date three representatives of the Nottingham employers gave fuller evidence, one of the Scottish employers was heard, and on two occasions Mr. Kenneth Black, F.R.C.S., attended to give the results of his own investigations in Nottingham undertaken at the instance of the manufacturers.

Any recommendation on the subject of Dupuytren's contraction involves consideration of the question whether other classes of workers than lace operatives should be afforded opportunities of making claims. We therefore took evidence as to occurrence among miners, from Dr. Moody on behalf of the Miners' Federation, and from Drs. W. Brown-Moir, T. Lister Llewellyn, W. E. Hume, and Robert McGhie on behalf of the Mining Association of Great Britain. Reference was made to the occurrence of the condition in railway servants, but the Amalgamated Society of Railway Servants felt unable to tender any evidence, and we therefore did not call on the Railway Companies, and, in the absence of evidence of occurrence in the shipbuilding trades, we eventually decided that the evidence tendered by the Federation of Shipbuilding Employers need not be taken. Evidence as to the affection generally was given by Dr. Robert Jones and Dr. Frank Shufflebotham.

Dupuytren's contraction of the *palmar fascia* was described by Dr. Jones as follows :—

"The palmar fascia is an unusual structure. Running through it there are longitudinal fibres which are really the prolongations of a muscle of the forearm, the palmaris longus. These spread out in a fan-shape manner in the palm of the hand, and then divide into slips to each finger, along which they extend as far as the pulp of the tips of the fingers, being especially strong along each side of the finger. These prolongations blend with the sheaths of the tendons, the deep fascia of the fingers, and also send slips to the sides of the bones, thus helping to form the tunnel or sheath in which the tendons run. A slip to the thumb is occasionally found, but is rarely of any size or strength. There is very rarely any contraction in it. Besides the longitudinal fibres prolonged from the tendon of the palmaris longus muscle, there are other longitudinal fibres which are attached above to what is known as the annular ligament, that is, the ligament which binds all the tendons down over the front of the wrist. It is in these longitudinal fibres that the shortening and thickening occurs which constitutes Dupuytren's contraction. Though the skin over these fibrous thickenings is puckered and tied down, this is entirely secondary, and there is no actual thickening, in my experience, of the skin itself. The process is, therefore, a plastic inflammatory one, which one would call fibrosis of the palmar fascia, and is not associated with any inflammatory thickening of the skin."

The contraction may occur either in one hand or in both, the right hand being that most often affected. It is much commoner in men than in women, and in the middle aged or elderly than in the young. Dr. Collis usefully distinguishes four stages in the affection, namely, contraction of the palmar fascia : (1) without flexion of the digits, (2) with one or more digits slightly flexed, (3) with one or more semi-flexed, and (4) with one or more totally flexed. Possibility of partial incapacity can arise only in the third and fourth stages. In the majority of cases development extends over a long period. In the first onset (which some witnesses found was occasionally accompanied with some pain) the only external sign is the contraction in the natural grooves of the skin below the ring finger or the little finger; in the most advanced stage one or more fingers are flexed immovably upon the palm.

Whether, when fully developed, the disease incapacitates, depends entirely on the class of work which the sufferer is required to perform. Incapacity arises purely

from the mechanical obstacle offered to the holding of certain instruments, to the reaching of the material or machinery, or to the performance of certain operations, while one or more fingers are flexed towards or on to the palm.

Some witnesses referred to methods of treating the condition, and the general opinion was expressed that local treatment might be successful, if begun early enough. Allusion was made to the Bier system of passive congestion, and to a simpler and less expensive method for producing a similar effect. Hyperextension of the affected parts may be of great use in the earlier stages, but if the condition is advanced, recourse must be had to multiple subcutaneous incisions. In the latest stage amputation of one or more fingers may be necessary, and we have had evidence of cases in which after such an operation the sufferer has been able to return to his work. There are, however, others in which the disease continues to develop despite surgical intervention, and if the condition is caused by the employment, there is therefore a case for the relief offered by compensation under the Act.

It is, however, on the question of causation that difficulty arises. Various opinions were brought to our notice. Leaving on one side cases of hook-hand caused by arthritis, of miners' beat hand (already scheduled) and of conditions either congenital or resulting from definite injuries, and confining attention to cases of true Dupuytren's contraction, we find that most authorities mention more than one cause. Suggestions of microbic or toxic causation find little support. In general, two factors are recognised—(1) constitutional predisposition (*e.g.*, a rheumatic or gouty tendency), and (2) a particular cause (most commonly said to be localized pressure). Among well-known authorities, Dupuytren, Sir James Paget, Sir William Gowers, and D'Arcy Power, refer to both factors; Adams and Anderson rule out pressure; Arbuthnot Lane suggests it; Luff denies the connection with gout.

If in many cases there is predisposition, it is necessary, in order to establish the industrial character of the affection, to have very strong evidence that occupational use of the hands is the determining cause, either in all cases or in cases distinguishable from those where it is absent. Further, to establish a connection between the condition and a particular employment it must be shown that the occupation involves the exercise of a type of pressure favourable to its production, and that incidence in that occupation is exceptional. The application of the last test at once rules out all the employments brought to our notice, save possibly that of the minding of lace machines. It is true that there are not available for comparison any universally accepted statistics as to normal incidence, but not even a *prima facie* case of exceptional incidence was made out for coal miners, and the question, as regards various other employments, was not seriously raised.

As regards the lace trade, Mr. Wardle's figures and Dr. Collis's subsequent inquiries suggested exceptional incidence. It was, therefore, necessary to go fully into the circumstances of this trade and to admit, in some detail, evidence bearing on the general question of causation. On this general question our Inquiry cannot be said to throw such light as would justify any definite conclusion. As to constitutional predisposition, Dr. Collis found that the incidence of gout and rheumatism among the lace operatives suffering from Dupuytren's contraction whom he examined was not heavier than among others; we did not find a history of those diseases in the majority of cases brought to our notice; and we do not understand the authorities quoted to us as making it clear that the constitutional predisposition must invariably be present. Even if it need not, however, we are impressed by the difficulty of distinguishing cases in which it plays a predominant part from those in which it does not. Passing to the part played by localized pressure, we were met by the impossibility of ascertaining conclusively what is the incidence of the disease among the classes engaged and not engaged in manual labour respectively. It is clear from the authorities, from the evidence, from correspondence that reached us, and from our own observation during the Inquiry that there are many cases of Dupuytren's contraction among persons not engaged in manual labour. Dr. Collis suggested, and other witnesses supported the suggestion, that inquiry into these cases would in the great majority elicit some history of exceptional pressure, *e.g.* through games or the pursuit of hobbies. This may be so, but it would not diminish the difficulty of deciding, in the case of a worker, whether in his case the disease was nevertheless occupational. There was universal agreement that the disease is far more common in men than in women, but it is not safe to assume that this fact establishes its occupational character. Many witnesses contended that it rather supported the hypothesis of constitutional predisposition, suggesting that rheumatism, or at any rate gout, is more frequently found in men than in women.

Two interpretations, also, were placed on the fact that the elderly are more commonly affected than the young, some witnesses suggesting that it was the longer period of use that accounted for the increase in the incidence of the malady, others pointing out that gout and rheumatism are more common in persons of advanced age. The frequent occurrence of the affection bilaterally (*e.g.*, in 63 out of Dr. Collis's 120 cases) must apparently be referred to constitutional predisposition, and so also existence of the contraction in the left hand alone in cases where localised pressure can be more certainly postulated in the case of the right. As regards the amount and nature of the pressure involved in the work of lace operatives there was again much conflict of opinion, some witnesses alleging that the work was comparatively light, others that though usually light, it continually involved exceptional and localised pressure in the operating of levers and starting wheels. If it were established that the incidence of the affection among these operatives is altogether exceptional, we should feel that a case was, so far, made out, and should be obliged to consider how the difficulty of establishing a general theory of causation and applying it in particular cases could be met. On this point of incidence, however, we were not satisfied. Mr. Wardle's figures raised a case for inquiry, and we wish to record our appreciation of the manner in which he presented his facts and his witnesses; and Dr. Collis's inquiries and his comparison of the number of cases among lace minders with the number of cases among tinplate workers and granite cutters seemed to show that incidence among the former was probably exceptional. Dr. Collis found among lace minders of all ages in the three branches of the lace trade, the following proportions affected:—

- Lever's Branch, 6·7 per cent. (of whom 3·9 per cent. had only the first stage of the disease).
- Curtain Branch, 9·6 per cent. (of whom 5·6 per cent. had only the first stage of the disease).
- Plain Net, 6·9 per cent. (of whom 4·6 per cent. had only the first stage of the disease).

Among those aged 60 and over the percentages were—

- Lever's Branch, 27·5 per cent. (of whom 15·9 per cent. had only the first stage);
- Curtain Branch, 21·7 per cent. (none in the first stage);
- Plain Net, 20 per cent. (10 per cent. in the first stage);

i.e., an average of 25 per cent. (of whom 11·6 per cent. were in the first stage).

Witnesses, however, pointed out that these figures related only to Nottingham, and that the incidence elsewhere in the lace trade was much less heavy. Dr. Collis agreed, but suggested that this was because Nottingham was the only centre of the industry in which the operatives had been employed sufficiently long for the full incidence of the malady to become manifest. The case for the lace operatives, therefore, depended at last on this question: Is incidence of the disease among them in Nottingham heavier than that among other persons, occupied or unoccupied, of similar ages in the locality? On this point the information carefully collected by Mr. Kenneth Black, the medical gentleman giving evidence for the employers, is very material. He obtained returns from 135 medical men in the Nottingham district, showing 131 cases of Dupuytren's contraction, of which 63 occurred in manual workers and 68 in other persons. 32 of the latter cases occurred among men and women of independent means. Of the cases among manual workers, 8 occurred in labourers, 8 in miners, and 8 in farmers and farm labourers. Among minders of lace machines there were only 4 cases returned. Further, Mr. Black personally examined all the inmates of the workhouse. The result he summarised thus:—

Total.	Average Age.	Average Years at Work.	Affected with Disease.	
			Stages 1, 2, 3, and 4.	Stages 2, 3, and 4.
270 inmates - - - -	63	40·7	57 (<i>i.e.</i> , 21 per cent.)	38 (<i>i.e.</i> , 14 per cent.)

Of these 270 inmates, 20 were "twist-hands," whose average age was 64·1, and the average duration of whose employment had been 43·7 years. Among these 20, only 3 (*i.e.*, 15 per cent.) had Dupuytren's contraction, and 1 (*i.e.*, 5 per cent.) had it only in the first stage.

In view of Mr. Black's figures, and having regard to the fact that no medical man in Nottingham spoke to the prevalence of the disease among lace minders, while the surgeons at the hospital disputed such prevalence, we cannot say that a case of exceptional incidence among lace minders is conclusively made out, even in Nottingham, and, therefore, (apart from the other difficulties, indicated above, in the way of establishing the occupational character of the malady) we are of opinion that Dupuytren's contraction in minders of lace machines ought not to be scheduled. We reach this conclusion with some reluctance, for our sympathies were strongly aroused by the cases we saw. An impression that there is some connection between an employment and an affection is not, however, sufficient to warrant the imposition of a legal liability on the employer. The connection must be established, and this condition is not at present fulfilled.

We recommend that Dupuytren's contraction should not be scheduled, either in general terms or as regards lace operatives alone.

WRITERS' CRAMP.

On this subject we heard evidence from a Medical Referee, from a medical man instructed by a Branch of the National Union of Journalists, from a representative of the Railway Clearing House and of the Railway Companies connected therewith, and from the Second Medical Officer to the General Post Office. Other representative bodies were invited to appear, but tendered no evidence. That which we heard, however, fully covered the ground, and affords a basis for definite conclusions.

Writers' cramp is a disease of the central nervous system resulting in failure in the co-ordination of the muscular movements necessary for writing. Its primary cause is undoubtedly to be found in a weakening or breakdown of the central controlling mechanism. It is, consequently, more likely to occur in individuals of neurotic and anxious temperament than in the robust. As secondary causes, may be cited bad styles of penmanship and, especially, overwork. Witnesses referred to analogous but rarer conditions among typewriters, pianists, violinists, hammermen and others, known generally as occupational neuroses, palsies, or cramps, but the evidence before us related mainly to writers' cramp and we propose therefore to confine our recommendation to this disease, and thus to the terms of our reference.

Writers' cramp is an occupational disease specific to the employment of writing.

Considering the very large number of persons employed in writing, the disease, from the evidence presented to us, is not very prevalent. Thus, among the staff of the Railway Clearing House and of the Railway Companies connected therewith, there could be traced in 25 years only 78 cases, of which five caused total incapacity, and among 8,518 employees of the General Post Office Dr. Sinclair of the Post Office knew only of 14 cases, mostly of persons now engaged in other work or using the left hand.

The precisely analogous affection of telegraphist's cramp was considered by the previous Committee, and on their recommendation was scheduled by the Order of the 2nd December 1908. Just as in that malady the defect is recorded on the Morse signalling slip, so in writers' cramp there is an alteration in the handwriting which will almost certainly reveal itself to the medical practitioner if the subject while under examination is required to write, and to attempt to continue to write, say, for half an hour. The early subjective symptoms, such as mere allegations of pain, are not enough to warrant a diagnosis; there must be the objective symptom of actual cramp, *i.e.* involuntary contraction of the muscles concerned, and the concomitant appearance of characteristic faults in the handwriting, with visible inability in the subject to write properly or, in some cases, even to maintain for an appreciable time an attempt at writing at all. A clear diagnosis can generally be made and the symptoms differentiated from those of mere fatigue, but experience and acumen are necessary to guard against the admission of other conditions simulating the disease. The evidence tended to show that, as a rule, actual onset of the affection was fairly sudden, although attempts at concealment might be practised for years. It generally manifests itself in early manhood or womanhood. Thus, of the 14 cases cited by one witness, 11 were less than 32 years of age, and, of seven referred to by another, all but one were under 40. And, unfortunately, whenever there is the true spasm or cramp, prognosis is gloomy unless the working conditions be altered, *e.g.* by the adoption of different methods of

sitting or writing, or the use of different pens, desk, &c., by learning to write with a typewriting machine or with the left hand, or by an entire change in employment. When the affection is present in a pronounced degree in the right hand, continued use of the left may develop it there. Incapacity for writing may therefore be, eventually, complete and permanent, and when, as we have said is often the case, the sufferer is young, the indefinite continuance of compensation might involve a serious burden on the compensator. We doubt whether this would be justified. Writers' cramp disables only for writing, not for any other occupation, and, though we think sufferers should receive compensation so that, in some cases, rest may lead to recovery, we feel that where inability to write continues after a long period of rest, the sufferer should seek other employment. We feel, too, that the scheduling of the disease may have far-reaching effects. Very large numbers of persons are engaged in writing, and it will be almost impossible for employers and for insurance companies to gauge the risk. We are, therefore, of opinion that compensation for a single disablement should be limited to a definite period, sufficient to show whether there is hope of recovery or whether it is advisable to take up some fresh occupation. It was stated in evidence that recovery in some cases results after a few months' rest, and we have considered whether we might recommend that the course adopted in the case of glassworkers' cataract (*see* the Secretary of State's Order of 2nd December 1908) should be followed and compensation be limited to a period of six months in all. On the whole we think a longer period advisable and we recommend that it should be 12 months. Further, it is necessary to safeguard employers against claims by persons who have contracted or accentuated the disease through occupying themselves in writing outside their employment. The onus of proof that the disease is due to the employment should, therefore, be on the person claiming compensation.

We recommend, then, that the disease be scheduled as "Writers' Cramp"; that the onus of proving that the disease is due to the employment be left on the person claiming compensation, and that compensation for a single disablement shall not be payable in respect of more than 12 months' incapacity in all.

SUMMARY OF RECOMMENDATIONS.

Our recommendations are that:—

- (1) Cowpox and Dupuytren's Contraction should not be scheduled.
- (2) The word "Nystagmus" added to the first column of the Schedule by the Order of 22nd May 1907 should be replaced by the words "Miners' Nystagmus in miners or others (a disease most common among miners, of which oscillation of the eyeballs is the commonest but not invariably present objective sign)." The word "mining" should be retained in the second column.
- (3) The words "Writers' Cramp" should be added to the first column of the Schedule, the second column being left blank, and compensation for a single disablement should be payable in respect of not more than 12 months' incapacity in all.

We desire to record our indebtedness to our Secretary, Mr. Arthur Locke, of the Home Office. His duties as Secretary have involved much labour, and the ability and courtesy with which he has discharged them have greatly facilitated our inquiry.

We have the honour to be,

Sir,

Your obedient Servants,

ELLIS J. GRIFFITH.

T. CLIFFORD ALLBUTT.

ALFRED HENRY RUEGG.

THOMAS M. LEGGE.

ARTHUR LOCKE,

21st July 1913.